	Application No.	Applicant(s)
Notice of Allowability	09/853,691	BEVERINA ET AL.
	Examiner	Art Unit
	Fred Ferris	2128

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *8 February 2006*.

2. ☒ The allowed claim(s) is/are *33-41*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

    1. ☐ Certified copies of the priority documents have been received.

    2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

FRED FERRIS
PRIMARY EXAMINER

DETAILED ACTION

1.   *This office action is responsive to applicant's request for reconsideration filed 8 February 2006. Claims 33-41 are currently pending in this application and now have been allowed over the prior art of record.*

Response to Arguments

2.   *Applicant's arguments filed 8 February 2006 have been fully considered and are persuasive. The 103(a) rejection of claims 33-41 has been withdrawn in view of applicant's arguments and the examiners amendment appearing below.*

Examiner acknowledges receipt to corrected drawings submitted as replacement sheets and withdraws the objection to the drawings.

EXAMINER'S AMENDMENT

3.   *An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.*

Authorization for this examiner's amendment was given in a telephone interview with Mr. James Heintz on 12 May 2006.

Amend independent claim 33 with the following:

Amend the preamble to claim 33 as follows:

Delete the first word "An" and *Insert* the phrase **A computer implemented** before the word "apparatus".

The preamble to claim 33 should now read:

33.   "**A computer implemented** apparatus for assessing risk comprising:"

Amend the last limitation of claim 33 (line 9) as follows:

Insert the phrase "*comprising a conditional probability network*" after the word "system" and before the word "in". Line 9 should now read:

"a decision support system **comprising a conditional probability network** in communication with...."

Amend dependent claim 41 with the following:

Delete the phase "decision support system" and insert the phase "conditional probability network" after the phrase "wherein the". Claim 41 should now read:

41. The apparatus of Claim 33, wherein the **conditional probability network** employs a Bayesian network.

Allowable Subject Matter

4.   Claims 33-41 are allowed over the prior art of record.

The following is an examiner's statement of reasons for allowance:

Applicants are disclosing a computer implemented system for assessing risk comprising a database storing information (actors, surroundings, observations), a simulation gaming environment communication with the database (determining threat vector and success), a plug-in interface communicating with the database, and a decision system

using a Bayesian network for calculation risk and vulnerability. This has been disclosed
in the prior art of record.

While these elements are individually disclosed in the prior art, the prior art of
record does not meet the conditions as suggested in MPEP section 2132, namely:

"The identical invention must be shown in as complete detail as is contained in
the ... claim." Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913,
1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim, but this
is not an **ipsissimis verbis** test, i.e., identity of terminology is not required. **In re Bond**,
910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990)."

In particular, the prior art of record does not explicitly disclose the specific
arrangement of system elements relating to a plug-in interface communication with the
database **and** a consequence calculator outputting information from the database **and**
inputting information concerning a consequence of undesirable event, in **combination**
with a decision support system calculating relative risk based on probability and
vulnerability that is determined from information in the database **and** information from
the simulation and gaming environment **and** the plug in interface, as required by
independent claim 33 and argued in applicant's response. (See: Figure 2, for example)
Here the recited "plug-in interface" and "conditional probability network" are interpreted
by the examiner as specifically defined in applicant's specification on pages 22, line 5 to
24, line 20, and in Figures 2 and 5 respectively.

The closest prior art uncovered during examination teaches certain limitations of
the claimed invention as follows:

U.S. Patent 5,850,352 issued to Moezzi: Teaches a simulated gaming environment inclusive of a virtual actor environment and a database storing and communicating information based on expert observations. However, Moezzi does not explicitly disclose the database **and** a _consequence calculator_ outputting information from the database **and** _inputting information concerning a consequence of undesirable event_, in **combination with** a decision support system calculating relative risk based on probability and vulnerability that is _determined from_ information in the _database_ **and** information from the _simulation and gaming environment_ **and** the _plug in interface_, as required by independent claim 33.

"Applications of Quantitative Modeling to Knowledge-Based Risk Assessment Studies", Biswas: Teaches assessing risk by calculating a probability that an event will occur including calculating risk based on event probability, and _consequences_ which would obviously include the "vulnerability" as assessed by experts in the field. Biswas also does not explicitly disclose the database **and** a _consequence calculator_ outputting information from the database **and** _inputting information concerning a consequence of undesirable event_, in **combination with** a decision support system calculating relative risk based on probability and vulnerability that is _determined from_ information in the _database_ **and** information from the _simulation and gaming environment_ **and** the _plug in interface_, as required by independent claim 33.

The features noted above relating to the specific combination and arrangement of system elements renders the claimed invention non-obvious over the prior art of record.

Dependent claims 34-41 are deemed allowable as depending from independent claim
33.

Any comments considered necessary by applicant must be submitted no later than

the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on

Statement of Reasons for Allowance."

Conclusion

5.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Fred Ferris whose telephone number is 571-272-3778

and whose normal working hours are 8:30am to 5:00pm Monday to Friday. Any inquiry

of a general nature relating to the status of this application should be directed to the

group receptionist whose telephone number is 571-272-3700. If attempts to reach the

examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can

be reached at 571-272-2279. The Official Fax Number is: (703) 872-9306

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